

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-52 are Canceled.

53. (New) A method for diagnosing diseases which are associated with disturbed glucose transport wherein at least one substance for detecting the expression and/or function of activated and/or inactive Sgk, in particular Sgk1 and/or Sgk3, and/or PKB, and/or Nedd, in particular Nedd4-2, is used.
54. (New) The method of claim 53, characterized in that the substance is at least one substance selected from the group of antibodies and nucleotides.
55. (New) The method of claim 53, characterized in that use is made of antibodies which are directed against phosphorylated and/or unphosphorylated sequences in Sgk, in particular Sgk1 and/or Sgk3, PKB and/or Nedd, in particular Nedd4-2.
56. (New) The method of claim 55, characterized in that use is made of antibodies which are directed against at least one phosphorylated and/or unphosphorylated kinase consensus sequence, in particular an Sgk1 consensus sequence, in a Nedd protein, in particular in the Nedd4-2 protein.
57. (New) The method of claim 53, characterized in that at least one mutation, in particular an inactivating mutation, is detected in Nedd, in particular in nedd4-2, in DNA, RNA and/or a Nedd protein from a biological sample, in particular a sample from a patient, with the mutation preferably being present in a segment of nedd which encodes an Sgk1 consensus sequence in the Nedd protein.
58. (New) The method of claim 57, characterized in that the mutation is

$S^{338D}$ Nedd4-2 and/or  $S^{444D}$ Nedd4-2.

59. (New) The method of claim 53, characterized in that at least one mutation, in particular an activating mutation, is detected in sgk, in particular in sgk1 and/or sgk3, and/or a gene for PKB, in DNA, RNA and/or an Sgk protein and/or PKB protein from a biological sample, in particular a sample from a patient.
60. (New) The method of claim 59, characterized in that the mutation is  $S^{422D}$ Sgk1 and/or  $T^{308D},S^{473D}$ PKB.
61. (New) The method of claim 53, characterized in that the diseases are the metabolic syndrome, in particular obesity.
62. (New) A method for diagnosing predispositions to obesity, characterized in that at least one polymorphism is detected in sgk, in particular sgk1 and/or sgk3, a gene for PKB, nedd, in particular nedd4-2, and/or sglt, in particular sglt1.
63. (New) The method of claim 62, characterized in that the polymorphism is a single nucleotide polymorphism (SNP).
64. (New) The method of claim 62, characterized in that the polymorphism is E8CC/CT;I6CC in sgk1.
65. (New) A method for exerting an effect on glucose transport, in particular intestinal and/or renal glucose transport in which at least one active compound is used.
66. (New) The method of claim 65, characterized in that the active compound exerts an effect on at least one Sgk, in particular Sgk1 and/or Sgk3, and/or PKB, and/or an effect on at least one Nedd, in particular Nedd4-2.

67. (New) The method of claim 65, characterized in that the active compound is directed against an Sgk, in particular Sgk1 and/or Sgk3, and/or PKB and/or a Nedd, in particular Nedd4-2.
68. (New) The method of claim 65, characterized in that the active compound is directed against activators, inhibitors, regulators and/or biological precursors of an Sgk, in particular of Sgk1 and/or Sgk3, and/or PKB and/or a Nedd, in particular Nedd4-2.
69. (New) The method of claim 65, characterized in that the active compound is a polynucleotide which preferably encodes a peptide, in particular a polypeptide.
70. (New) The method of claim 65, characterized in that the active compound is a peptide, preferably a polypeptide.
71. (New) The method of claim 70, characterized in that the peptide exerts an effect on the expression and/or function of an Sgk, in particular Sgk1 and/or Sgk3, and/or PKB and/or a Nedd, in particular Nedd4-2.
72. (New) The method of claim 65, characterized in that the active compound is a “small molecular compound”, preferably a “small molecular compound” having a molecular weight (MW) of < 1000.
73. (New) The method of claim 65, characterized in that the active compound inhibits at least one Sgk, in particular Sgk1 and/or Sgk3, and/or PKB, and/or stimulates at least one Nedd, in particular Nedd4-2, in particular for the purpose of preventing or treating diseases which are connected with disturbed glucose absorption.

74. (New) The method of claim 65, characterized in that the active compound is at least one kinase inhibitor, preferably staurosporine and/or chelerythrone, or one of their analogs, and/or at least one ligase activator.
75. (New) A method for treating diseases which are connected with disturbed glucose transport in which at least one active compound for exerting an effect on, in particular inhibiting, at least one Sgk and/or PKB, and/or for exerting an effect on, in particular stimulating, at least one Nedd, is used.
76. (New) The method of claim 73, characterized in that the diseases are the metabolic syndrome, in particular obesity.

  

77. (New) The method of claim 65, characterized in that the active compound stimulates at least one Sgk, in particular Sgk1 and/or Sgk3, and/or PKB, and/or inhibits at least one Nedd, in particular Nedd4-2, for the purpose of increasing glucose transport, in particular for increasing the bodyweight of animals.
78. (New) The method of claim 77, characterized in that the active compound is at least one Sgk activator and/or PKB activator, in particular a growth factor, preferably IGF1, and/or insulin.
79. (New) The method of claim 77, characterized in that the active compound is at least one stimulant of the transcription of sgk1 and/or sgk3 and/or a gene for PKB, preferably at least one glucocorticoid, mineral corticoid, gonadotropin and/or cytokine, in particular TGF $\beta$ .
80. (New) A diagnostic kit which comprises at least one substance for detecting the expression and/or function of activated and/or inactive Sgk, in particular Sgk1 and/or Sgk3, and/or PKB and/or Nedd, in particular Nedd4-2, for

diagnosing diseases which are associated with disturbed glucose transport.

81. (New) The diagnostic kit of claim 80, characterized in that the diseases are the metabolic syndrome, in particular obesity.
82. (New) An antibody, characterized in that it is directed against at least one phosphorylated kinase consensus sequence, in particular an Sgk1 consensus sequence, in a Nedd protein, in particular in the Nedd4-2 protein.
83. (New) An antibody, characterized in that it is directed against at least one unphosphorylated kinase consensus sequence, in particular an Sgk1 consensus sequence, in a Nedd protein, in particular in the Nedd4-2 protein.
84. (New) An antibody, characterized in that it is directed against at least one mutated kinase consensus sequence, in particular an Sgk1 consensus sequence, in a Nedd protein, in particular in the Nedd4-2 protein.
85. (New) The antibody of claim 84, characterized in that the Nedd protein with a mutated kinase consensus sequence is  $S^{338D}$ Nedd4-2 and/or  $S^{444D}$ Nedd4-2.
86. (New) A composition, in particular a pharmaceutical composition, comprising an effective quantity of at least one active compound which exerts an effect on glucose transport, in particular intestinal and/or renal glucose transport, and, where appropriate, a pharmaceutically acceptable excipient.
87. (New) The composition of claim 86, characterized in that the active compound exerts an effect on at least one Sgk and/or PKB and/or at least one Nedd.
88. (New) The composition of claim 86, characterized in that the active compound exerts an effect on activators, inhibitors, regulators and/or biological precursors of an Sgk, in particular of Sgk1 and/or Sgk3, and/or PKB and/or a

Nedd, in particular Nedd4-2.

89. (New) The composition of claim 86, characterized in that the active compound is a polynucleotide which preferably encodes a peptide, in particular a polypeptide.
90. (New) The composition of claim 86, characterized in that the active compound is a peptide, preferably a polypeptide.
91. (New) The composition of claim 90, characterized in that the peptide exerts an effect on the expression and/or function of an Sgk, in particular Sgk1 and/or Sgk3, and/or PKB and/or a Nedd, in particular Nedd4-2.
92. (New) The composition of claim 86, characterized in that the active compound is a “small molecular compound”, preferably a “small molecular compound” having a molecular weight (MW) of < 1000.
93. (New) The composition of claim 86, characterized in that the active compound inhibits at least one Sgk and/or PKB and/or stimulates at least one Nedd.
94. (New) The composition of claim 86, characterized in that the active compound is at least one kinase inhibitor, preferably staurosporine and/or chelerythrine or one of their analogs, and/or at least one ligase activator.
95. (New) The composition of claim 86, characterized in that the active compound stimulates at least one Sgk and/or PKB and/or inhibits at least one Nedd.
96. (New) The composition of claim 95, characterized in that the active compound is at least one Sgk activator and/or PKB activator, in particular a growth factor, preferably IGF1, and/or insulin.

97. (New) The composition of claim 95, characterized in that the active compound is at least one stimulant of the transcription of sgk1 and/or sgk3 and/or a gene for PKB, preferably at least one glucocorticoid, mineral corticoid, gonadotropin and/or cytokine, in particular TGF $\beta$ .
98. (New) A method for producing transgenic animals, excluding humans, which exhibit an increase in lipid deposition in adipose tissue, characterized in that the expression and/or function of Sglt, in particular Sglt1, is increased.
99. (New) The method of claim 98, characterized in that Sglt, in particular Sglt1, is overexpressed.
100. (New) The method of claim 98, characterized in that the expression and/or function of at least one Sgk, in particular Sgk1 and/or Sgk3, and/or PKB, is increased.
101. (New) The method of in claim 100, characterized in that at least one sgk, in particular sgk1 and/or sgk3, and/or at least one gene for PKB, is overexpressed.
102. (New) The method of claim 100, characterized in that use is made of at least one activating mutation of sgk, in particular of sgk1 and/or sgk3, and/or of a gene for PKB, in particular  $S^{422D}$ sgk1 and/or  $T^{308D},S^{473D}$ PKB.
103. (New) The method of claim 98, characterized in that the expression and/or function of at least one Nedd, in particular Nedd4-2, is decreased.
104. (New) The method of in claim 103, characterized in that use is made of at least one inactivating mutation of nedd, in particular of nedd4-2, in particular  $S^{338D}$ nedd4-2 and/or  $S^{444D}$ nedd4-2.